

CLAIMS

1. (currently amended) A method of verifying that devices in a network are properly connected physically, said method comprising:
 - receiving from a device in said network a listing that identifies other devices coupled to said device and that identifies which communication port of said device each of said other devices is coupled to;
 - comparing said listing against reference information representing a design of said network; and
 - identifying discrepancies between said listing and said reference information; and
 - generating a report identifying said discrepancies wherein said report comprises information identifying an incorrectly placed network cable, device and port identifiers indicating wherein said incorrectly placed network cable is inserted, and device and port identifiers identifying where said incorrectly placed network cable should be inserted.
2. (original) The method of Claim 1 wherein said reference information comprises a map of said network.
3. (original) The method of Claim 1 wherein said reference information comprises, for each of said devices in said network, identification of the type of device and a media access control (MAC) address for each respective network interface cards.
4. (original) The method of Claim 1 wherein said reference information comprises identification of a source and a destination for a network cable.
5. (original) The method of Claim 4 wherein said reference information comprises a socket identifier for a source device coupled to said network cable and a socket identifier for a destination device coupled to said network cable.
6. (original) The method of Claim 1 wherein said listing comprises a MAC address table.

7. (original) The method of Claim 1 further comprising:
issuing a command to view said listing.
8. (original) The method of Claim 1 wherein said comparing comprises:
comparing port numbers for said other devices in said listing against port
numbers for said other devices in said reference information.
9. (cancelled)
10. (cancelled)
11. (original) The method of Claim 1 further comprising:
generating a report identifying instances in which said reference information
and said listing are in agreement.
12. (original) The method of Claim 1 further comprising:
generating a report identifying instances in which connections between
devices cannot be verified.
13. (original) The method of Claim 1 further comprising:
sending a signal over a physical connection between devices of said network
to verify integrity of said physical connection.
14. (original) The method of Claim 1 wherein said devices are selected
from the group consisting of switches, routers, computers, load balancers, and
firewalls.
15. (currently amended) A computer system comprising:
a memory unit; and
a processor coupled to said memory unit, said processor for implementing a
method for verifying that devices in a network are properly connected physically,
said method comprising:
processing connection information received from a device, wherein said
connection information identifies other devices coupled to said device and also
identifies which communication port of said device each of said other devices is
coupled to;

evaluating said connection information against reference information that describes an arrangement of said network; ~~and~~

identifying differences between said connection information and said reference information; and

generating a first report identifying said differences wherein said report comprises information identifying an incorrectly placed network cable, device and port identifiers indicating wherein said incorrectly placed network cable is inserted, and device and port identifiers identifying where said incorrectly placed network cable should be inserted.

16. (original) The computer system of Claim 15 wherein said reference information comprises a computer-readable version of a map of said network.

17. (original) The computer system of Claim 15 wherein said reference information comprises, for each of said devices in said network, identification of the type of device and a media access control (MAC) address for each respective network interface cards.

18. (original) The computer system of Claim 15 wherein said reference information comprises a socket identifier for a source device coupled to a network cable and a socket identifier for a target device coupled to said network cable.

19. (original) The computer system of Claim 15 wherein said connection information comprises a MAC address table for said device.

20. (original) The computer system of Claim 15 wherein said evaluating comprises:

searching said connection information for a MAC address associated with each of said other devices;

locating in said connection information a port number associated with a respective MAC address; and

comparing said port number in said connection information against a respective port number in said reference information.

21. (currently amended) The computer system of Claim 15 wherein said method further comprises:

producing a second report summarizing results of said evaluating.

22. (original) The computer system of Claim 15 wherein said method further comprises:

causing a signal to be sent over a cable connecting devices in said network to verify the physical integrity of said cable.

23. (currently amended) A computer-usable medium having computer-readable program code embodied therein for causing a computer system to perform a method of verifying that devices in a network are properly connected physically, said method comprising:

accessing first information that describes a configuration of said network including connections between said devices;

accessing second information received from said devices, said second information describing actual connections between said devices;

comparing said first information and said second information; and

generating a message when there is a difference between said first information and said second information wherein said message further comprises information identifying an incorrectly placed network cable, device and port identifiers indicating wherein said incorrectly placed network cable is inserted, and device and port identifiers identifying where said incorrectly placed network cable should be inserted.

24. (original) The computer-usable medium of Claim 23 wherein said first information is derived from a computer-readable map of said network.

25. (original) The computer-usable medium of Claim 23 wherein said first information comprises, for each of said devices in said network, identification of the type of device and a media access control (MAC) address for each respective network interface card.

26. (original) The computer-usable medium of Claim 23 wherein said first information comprises a socket identifier for a source device coupled to a network cable and a socket identifier for a destination device coupled to said network cable.

27. (original) The computer-usable medium of Claim 23 wherein said second information comprises MAC address tables resident on said devices.

28. (original) The computer-usable medium of Claim 23 wherein said computer-readable program code embodied therein causes a computer system to perform said method comprising:
producing a report comprising said message.

29. (cancelled)

30. (original) The computer-usable medium of Claim 23 wherein said computer-readable program code embodied therein causes a computer system to perform said method comprising:
causing signals to be sent over cables connecting said devices.